TESLYUK, Ye.V.

Determining the displacement of water-oil contact and establishing the dynamics of flooding in various systems of pattern flooding. Trudy VNII no.37:87-95 '62. (MIRA 16:6)
(Oil field flooding)

TESLYUK, Ye.V.; KAPYRIN, Yu.V.; TREBIN, G.F.

Solving certain problems of heat conductivity and flow occurring in petroleum production involving the use of thermal drive. Trudy VNII no.37:271-289 '62. (MIRA 16:6)
(Petroleum production, Thermal)

TESLYUK, Ye.V.; KAPYRIN, Yu.V.; TREBIN, G.F.

Estimating the efficiency of thermal drive. Neft. khoz. 40 no.8: 42-49 Ag '62. (MIRA 17:2)

VOLODIN, V.A.; KAPYRIN, Yu.V.; TESLYUK, Ye.V.

Studying the vertical profile of the output and flow rates of fluids in producing and injection wells. Nauch.-tekh. sbor. po dob. nefti no.20:66-71 '63. (MIRA 17:6)

TESLYUK, Ye.V.; TREBIN, G.F.; GETTOVSKIY, Yu.M.

Flow of mutually soluble fluids under conditions of plane-radial flow and in current pipes of variable cross section. Trudy VNII no.40:115-136 '63 (MIRA 17:7)

TESLYUK, Ye.V.

Heat conductivity and flow when using the thermal recovery method on porous reservoir rocks. Nauch.-tekh. sbor. po dob. nefti no.22: 50-55 '64. (MIRA 17:9)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

TESLYUK, Ye.V.; OSTROVSKIY, Yu.M.

Determining the yield of wells in the presence of caves, and thinning interlayers and screens in bottom zones. Nauch. tekh. sbor. po dob. nefti no.27:31-38 '65. (MIRA 18:9)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut i Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut ugol'noy, rudnoy, neftyanoy i gazovoy promyshlennosti Ukr SSR.

TESLYUK, Ye.V.; TREBIN, G.F.; OSTROVSKIY, Yu.M.

Theoretical investigations of the flow of mutually soluble fluids. Trudy VNII no.42:174-180 '65. (MIRA 18:5)

TESLYUK, Ye.V.; ROZENBERG, M.D.; KAPYRIN, Yu.V.; TREBIN, G.F.

Nonisothermal multiphase flow and the calculation of thermodynamic effects in the development of oil fields. Trudy VNII no.42:281-293 '65. (MIRA 18:5)

TESLYUK, YE U

AID P - 2690

Subject : USSR/Mining

Card 1/1 Pub. 78 - 8/21

Authors : Teslyuk, Ye. U., Usachev, P. M. and Shevtsov, A. A.

Title : Combined action on the zone adjacent to the well bottom in a hydraulic breakthrough of the bed

Periodical : Neft. khoz., 33, 5, 37-41, My 1955

Abstract : The author discusses the method of secondary recovery by means of pumping a viscous salt-acid liquid through the well bottom to achieve a breakthrough of the bed adjacent to the well bottom. Different factors are analysed in order to ascertain the proper viscosity of the fluid pumped.

Institution : None

Submitted : No date

TESMENITSKIY, D.I.

ANTONOV, I.A., kand.tekhn.nauk; ANTOSHIN, Ye.V., inzh.; ASINOVSKAYA, G.A., inzh.; VASIL'YEV, K.V., kand.tekhn.nauk; GUZOV, S.G., inzh.; DEYKUN, V.K., inzh.; ZAYTSEVA, V.P., inzh.; KAZENKOV, P.P., inzh.; KARAN, Yu.B., inzh.; KOLTUNOV, P.S., kand.tekhn.nauk; KOROVIN, A.I., inzh.; KRZHECHKOVSKIY, A.K., inzh.; KUZNETSOVA, Ye.I., inzh.; MATVEYEV, N.N., tekhnik; MOROZOV, M.Ye., inzh.; NEKRASOV, Yu.I., inzh.; NECHAYEV, V.D., kand.tekhn.nauk; NINBURG, A.K., kand.tekhn.nauk; SPEKTOR, O.Sh., inzh.; STRIZHEVSKIY, I.I., kand.khim.nauk; TESMENITSKIY, D.I., inzh.; KHROMOVA, TS.S., inzh.; TSEUNEL', A.K., Inzh.; SHASHKOV, A.N., kand. tekhn.nauk, dots.; SHELECHNIK, M.M., inzh.; SHUKHMAN, D.Ya., inzh.; EDEL'SON, A.M., inzh.; VOLODIN, V.A., red.; UVAROVA, A.F., tekhn.red.

[Machines and apparatuses designed by the All-Union Institute of Autogenous Working of Metals] Mashiny i apparty konstruktsii VNIIAvtogen. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, 1957. 173 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut avtogennoi obrabotki metallov, no.9)
(Gas welding and cutting--Equipment and supplies)

TESMENITSKIY D.I.

135-58-1-15/23

AUTHOR: Strizhevskiy, I.I., Candidate of Chemical Sciences and Tesmenitskiy, D.I., Engineer

TITLE: Utilization of Fine Calcium Carbide in Acetylene Generators (Ispol'zovaniye melkogo karbida kal'tsiya v atsetilenovykh generatorakh)

PERIODICAL: Svarochnoye Proizvodstvo, 1958, Nr 1, pp 36 - 38 (USSR)

ABSTRACT: In the water-decomposition of fine granulated calcium carbide (in acetylene generators) special safety measures have to be observed. An increased amount of dust, which cannot always be completely eliminated, brings a dangerous factor into the treatment of fine carbide by generators in systems such as "water on carbide" and "displacement of water". The rate of interaction of carbide and water can be considerably reduced, if the surface of fine carbide parts is covered by a layer of oil product. Heavy oil products, particularly mazout, are preferably used. Figure 1 gives data on rates of carbide decomposition, from which it can be seen that the decomposition of carbide, which was not mixed with mazout, takes 5.5 minutes at an initial water temperature of 19° C. The decomposition times of carbide mixed with 3 and 5 % of mazout are 11 and 20.5 min. respectively.

Card 1/2

Utilization of Fine Calcium Carbide in Acetylene Generators 135-58-1-15/23

Data on decomposition rates of 8/15 granulated carbide, are given in Figure 2. The author concludes that calcium carbide with a 2/8 and 8/15 granulation, mixed with 5 % dry mazout can safely be used in generators of the following types: MG, GNV-1.25, GVR-1.25, GVR-3, STVK, GRK-10 and the rated capacity of these generators is ensured. A filter must be placed before the water seal containing 10 to 25 mm granulated coke. The holding capacity of the filter must not be below 0.35 ltr per 1 cubic meter of the generator output per hour. The carbide charge must be reduced by 25 % compared with the standard charge. There are 2 tables and 2 diagrams.

ASSOCIATION: VNIIAvtogen

AVAILABLE: Library of Congress

Card 2/2 1. Generators (Acetylene) 2. Calcium carbids—Applications

STRIZHEVSKIY, I.I., kand. khim. nauk; TESMENITSKIY, D.I., inzh.

Processing granulated calcium carbide mixed with fuel oil. Trudy VNIIAvtogen no.5:256-260 '59. (MIRA 12:6)
(Calcium carbide) (Acetylene generators)

STRIZHEVSKIY, I.I., kand.khim.nauk; TESMENITSKIY, D.I., inzh.

Dry ceramic metal protective seals for natural gas. Svar. proizv. no.9:36-38 S '61. (MIRA 14:8)

1. Gosudarstvennyy institut azotnoy promyshlennosti (for Strizhevskiy). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov (for Tesmenitskiy).
(Ceramic metals)
(Filters and filtration)

ASINOVSKAYA, Gnesya Abramovna; ZELIKOVSKAYA, Nataliya Mikhaylovna; KOROVIN, Andrey Ivanovich; KRAVETSKIY, G.A.; NEMKOVSKIY, I.A.; OFITSEROV, D.M.; TESMENITSKIY, D.I.; FISHKIS, M.M.; SHAPIRO, I.S.; GLIZMANENKO, D.L., kand. tekhn. nauk, red.; KLIMOVICH, Yu.G., red.; DORODNOVA, L.A., tekhn. red.

[Flame metalworking processes]Gazoplamennaia obrabotka metallov. [By] G.A.Asinovskaia i dr. Moskva, Proftekhizdat, 1962. 556 p. (MIRA 16:3)
(Gas welding and cutting) (Flame hardening) (Metal spraying)

TESMENITSKIY, D.I., inzh.; OFITSEROV, D.M., inzh.

Increasing the output of acetylene distribution systems. Svar. proizv. no.1:30-32 Ja '63. (MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov.
(Gas welding and cutting--Equipment and supplies)

TESMENITSKIY, D.I., inzh.; OFITSEROV, D.M., inzh.

Portable acetylene generator, AND-1-61. Svar. proizv. no.8: 36-37 Ag '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov.

STRIZHEVSKIY, I.I., kand. khimicheskikh nauk; TESMENITSKIY, D.I., inzh.

Flame extinction in dry ceramic-metal seals. Trudy VNIIAvtogen no.9:111-123 '63. (MIRA 16:12)

ARTYUKHOVSKAYA, S.A.; TESMENITSKIY, D.I.; ASINOVSKAYA, G.A.; BOYKO, M.I.; KOLTUNOV, P.S.; NEKRASOV, Yu.L.; KOROVIN, A.I.; NECHAYEV, V.D.; NINBURG, A.K.; SHASHKOV, A.N.; EDEL'SON, A.M.; ANTONOV, I.A., kand. tekhn. nauk, red.

[Using acetylene substitute gases for flame metalworking.] Primenenie gazov-zamenitelei atsetilena pri gazoplamennoi obrabotke metallov. Moskva, Mashinostroenie, 1964. 150p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut avtogennoi obrabotke metallov. Spravochnye materialy po gazoplamennoi obrabotke metallov, no.23). (MIRA 17:9)

TESMENITSKIY, D.I., inzh.; OFITSEROV, D.M., inzh.

Stationary low-pressure GND-40-61 acetylene generator. Svar. proizv. no.3:27-29 Mr '64. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov.

VORONTSOVA, Ye.I., doktor med. nauk; TESMENITSKIY, D.I., inzh.

Consultations on questions asked in our readers' letters. Svar. proizv. no.8:48 Ag '64. (MIRA 17:9)

1. Institut gigiyeny truda i professional'nykh zabolevaniy AMN SSSR (for Vorontsova). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov (for Tesmenitskiy).

TESMENITSKIY, D.I.; POCHUYEVA, E.A.

Determining the explosion pressure of mixtures of methane+oxygen and propane+butane+oxygen. Trudy VNIIAvtogen no.12:30-37 '64. (MIRA 18:3)

TESMENITSKIY, D.I., inzh.; POCHUYEVA, E.A., inzh.

Explosion pressure of mixtures of flammable gas with oxygen. (MIRA 18:1)
Svar.proizv. no.12:35-38 D '64.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov.

L 7894-66 EWT(m)/EPF(c)/EWP(j)/EWA(c) RM

ACC NR: AP5024966 SOURCE CODE: UR/0286/65/000/026/0030/0030

AUTHORS: Shashkov, A. N.; Tesmenitskiy, D. I.; Ofitserov, D. M.; Zakharova, N. I.

ORG: none

TITLE: Method for obtaining acetylene. Class 12, No. 173748 [announced by All-Union Scientific Research Institute for Autogenous Machine Building (Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennogo mashinostroyeniya)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 30

TOPIC TAGS: acetylene, calcium carbide, isoamyl alcohol, kerosene

ABSTRACT: This Author Certificate presents a method for obtaining acetylene in high pressure gas generators by interacting calcium carbide with hot water. To prevent explosion hazards, the reaction is carried out at temperatures not exceeding 40C in an inert medium such as kerosene. Antifoaming agents such as isoamyl alcohol are added to the inert medium.

SUB CODE: 07/ SUBM DATE: 16Oct64

UDC: 662.766.3

nw

Card 1/1

TESMENITSKIY, D.I., inzh.; CHUGUNOVA, G.I., inzh.

Stationary ASK-1-63 acetylene generator. Svar. proizv. no.3: 38-39 Mr '65. (MIRA 18:5)

1. VNIIAVTOGENMASh.

TESMENITSKIY, D.I., inzh.; OFITSEROV, D.M., inzh.

Modernized GRK-10 acetylene generator. Svar.proizv. no.12:39-40 D '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennogo mashinostroyeniya.

VAYSGANT, A.S., inzhener; TESMENITSKIY, L.I.

Assembling and welding large diameter steel pipes. Biul.stroi.tekh. 10 no.15: 17-19 O '53. (MLRA 6:10)
(Pipe, Steel)

ACC NR: AP6021584 (N) SOURCE CODE: UR/0402/66/000/003/0371/0372

AUTHOR: Orlova, N. N.; Sokolova, N. N.; Orlova, A. V.; Berlyant, M. L.; Tesminitskiy, G. L.; Jen, Kuei-fang

ORG: none

TITLE: Characteristics of influen a virus strains isolated at epidemiological Foci in 1965

SOURCE: Voprosy virusologii, no. 3, 1966, 371-372

TOPIC TAGS: epidemiology, virology, virus, influenza virus

ABSTRACT:
Of three virus strains isolated from patients in two influenza outbreaks, one resembled standard strain PR8 and the other two were identified as new type A strains. Their biological and antigenic properties are being studied. [W.A. 50; CBE No. 10]

SUB CODE: 06/ SUBM DATE: none/

Card 1/1

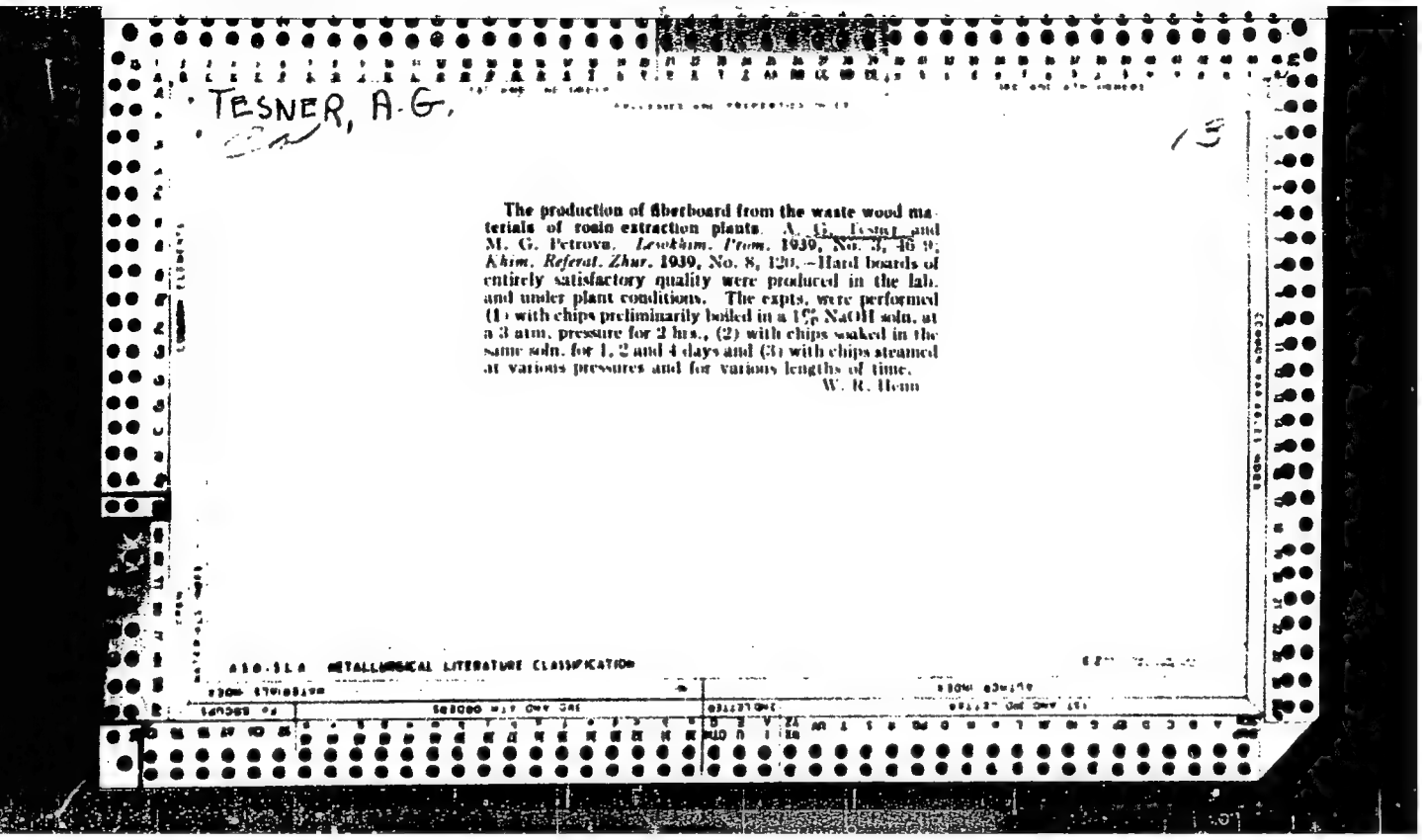
TESNAVE, E.R.; SHAMSON, A.S.

Proportional-action pulse electronic controller. Priborostroenie no.3:18-19 Mr '63. (MIRA 16:6)

(Electronic control)

TESNEK, Yuriy Ivanovich; MALYUKOVA, G.S., nauchn. red.

[Magnetic measurements] Magnitnye izmereniia. Moskva, TSentr. nauchno-issl. in-t patentnoi informatsii i tekhniko-ekon. issl., 1964. 39 p. (MIRA 18:6)

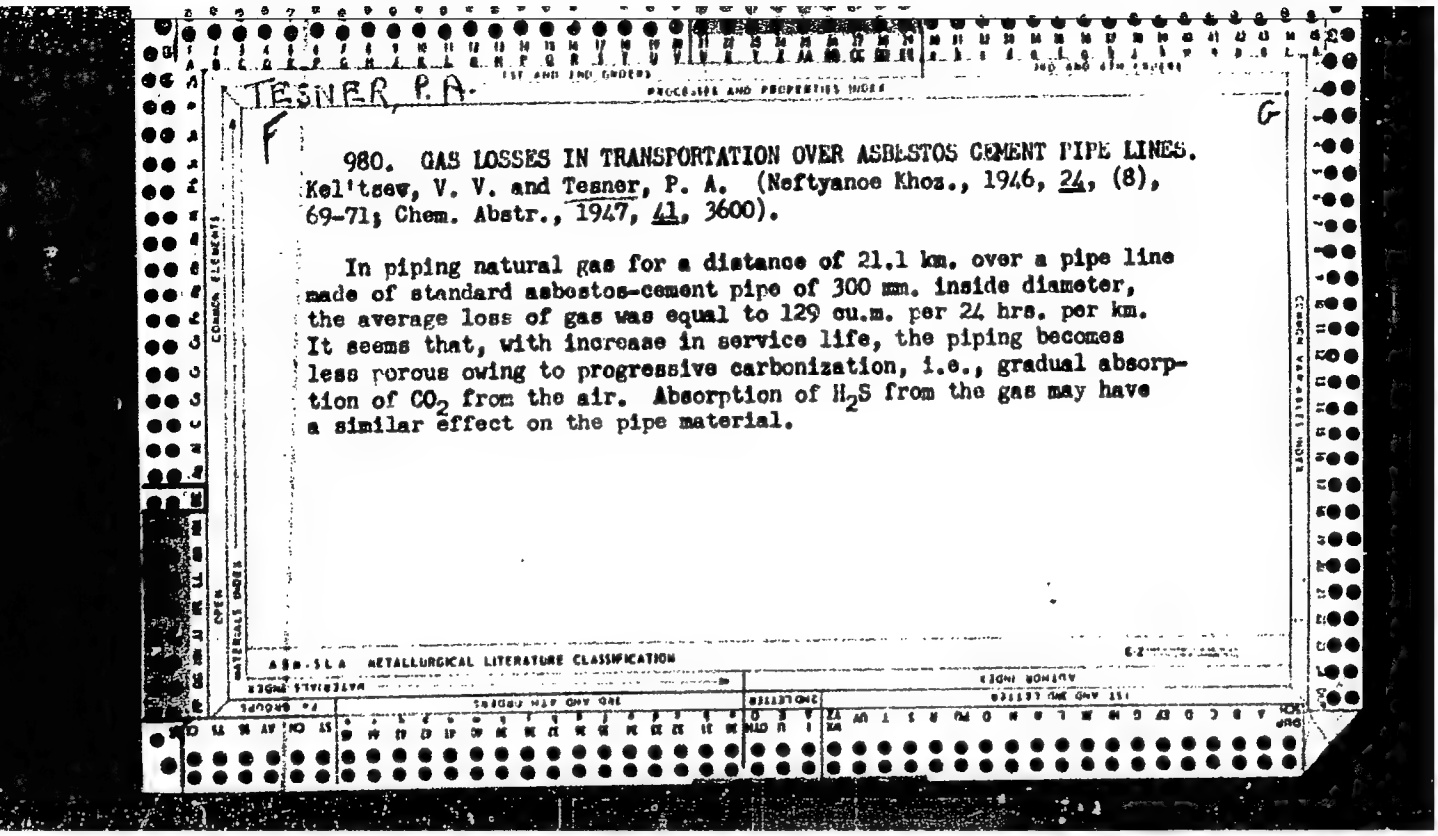


TESNER, A.G.

15

The production of fiberboard from the waste wood materials of resin extraction plants. A. G. Tesner and M. G. Petrova. *Lesokhim. Prom.* 1939, No. 3, 46–9; *Khim. Referat. Zhur.* 1939, No. 8, 120.—Hard boards of entirely satisfactory quality were produced in the lab. and under plant conditions. The expts. were performed (1) with chips preliminarily boiled in a 1% NaOH soln. at a 3 atm. pressure for 2 hrs., (2) with chips soaked in the same soln. for 1, 2 and 4 days and (3) with chips steamed at various pressures and for various lengths of time.

W. R. Henn



TESNER, P. A.

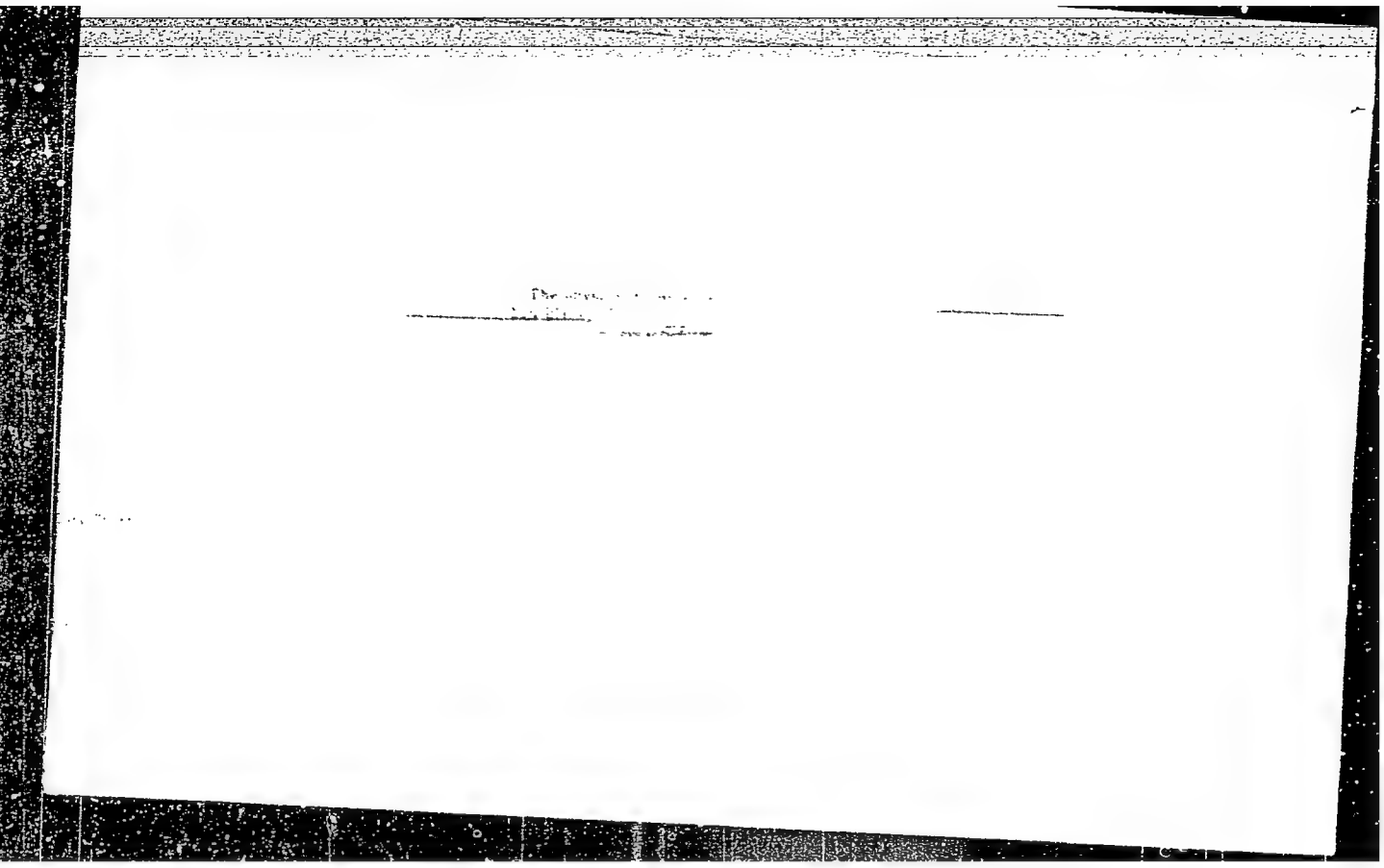
F

980. GAS LOSSES IN TRANSPORTATION OVER ASBESTOS CEMENT PIPE LINES. Kel'tsev, V. V. and Tesner, P. A. (Neftyanoe Khoz., 1946, 24, (8), 69-71; Chem. Abstr., 1947, 41, 3600).

In piping natural gas for a distance of 21.1 km. over a pipe line made of standard asbestos-cement pipe of 300 mm. inside diameter, the average loss of gas was equal to 129 cu.m. per 24 hrs. per km. It seems that, with increase in service life, the piping becomes less porous owing to progressive carbonization, i.e., gradual absorption of CO_2 from the air. Absorption of H_2S from the gas may have a similar effect on the pipe material.

G

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



1. E. YA. ROBINOVICH, T. D. SNEGIREVA, P. A. TESNER

2. USSR (600)

4. Carbohydrates in the Body

7. Use of carbohydrates in the brain during its various physiological and pathological states. Nauch. biul. Len. un. no. 28. 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

TESNER, P. A.

USSR/Chemistry - Carbon Black 21 Sep 51

"A New Method for Determining the Specific Surface of Carbon Black," P. A. Tesner, I. S. Rafalykes

"Dok Ak Nauk SSSR" Vol LXXX, No 3, pp 401-403

A hydrocarbon is decompd on the surface of carbon black causing a layer of carbon to form. The speed at which this layer forms is proportional to the surface on which the decompn occurs. Two equally weighing samples of carbon, an unknown and a std, are introduced into the zone of reaction. The resultant relationship between their wts is a measure of the surface of the unknown.

210T35

KEL'TSEV, V.V.; TESNER, P.A.; L'VOVA, L.A., vedushchiy redaktor; POLOSINA, A.S., tekhnicheskiy redaktor

[Carbon-black; its properties, production and use] Sazha - svoistva, proizvodstvo i primenenie. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1952. 170 p. (MLRA 9:10)
(Carbon-black)

TESNER, P.A.

British Abst.
A I
Aug. 1953
Chemical Equilibria and Kinetics

1952.

Formation of carbon on the surface in the thermal decomposition of hydrocarbons. P. A. Tesner and I. S. Rafal'kes (*C. R. Acad. Sci. U.R.S.S.*, 87, 821—824). CH_4, C_2H_2, and C_4H_8 diluted with N_2 are passed at temp. from 700° to 1000° over lamp black or Pt, and the amounts of C deposited are determined by weighing. The rates of deposition of C from hydrocarbon–N_2 mixtures are proportional to the % of hydrocarbon in the mixture, the experimental points for the three hydrocarbons falling on the same straight line. H_2 formed during the decomposition reaction lowers the rate of C deposition and prevents the determination of the abs. value of the rate. Admixture of 50% of H_2 virtually stops the deposition of C. On Pt, porcelain, quartz, Al_2O_3, and aluminosilicates the rate is slower than on a C surface and increases as the surface becomes coated with C. The formation of C has a high temp. coeff. and an activation energy of 70—100 kg.-cal. per g.-mol. The quantities of H_2 and C formed are in stoicheiometric ratios.

S. K. Lachowicz

5/11-54

USSR/Chemistry - Carbon Formation
Fuels

Dec 52

"Study of the Growth Process of Carbon Particles With the Aid of an Electron Microscope," P. A. Tesner and A. I. Yecheystova, Inst of Phys Chem, Acad Sci USSR, All-Union Sci Res Inst of Natural Gases

"DAN SSSR" Vol 87, No 6, pp 1029-1031

The formation of carbon threads during the thermal decompn of hydrocarbons is connected with the presence of hydrogen in the gaseous phase.

240T13

Successive photographs taken with an electron microscope indicate that carbon threads, after being removed from the reaction space and introduced there again, grow in a uniform manner on all sides at a rate several times slower than that of the carbon particles. Presented by Acad P. A. Rebinder 17 Oct 52.

240T13

PA 240T13

TESNER, P. A.

ROBINOVICH, YE. YA., SNEGIREVA, T. D., AND TESNER, P. A.

Investigating the Catalytic Activity of Carbon in Hydrocarbon Re-Forming Processes

Investigated the catalytic activity of channel black, activated charcoal, and aluminum silicate catalyst in reactions involving the thermal decomposition, dehydrogenation, and cyclization of hydrocarbons. Determined the relative quantities of thermal decomposition products in mg/hr for one m^2 of catalyst surface. Established that activated charcoal catalyzes the rupture of the C-C and C-H bonds and also catalyzes the cyclization reaction. The order of increasing activity of the three catalysts studied are activated charcoal, aluminum silicate catalyst, and carbon. Carbon was not found to be suitable as a cracking catalyst since its specific surface decreases too rapidly and hence loses its activity. (RZhKhim, No. 1,1955). Tr. Vses. N.-I. In-ta Prirodnykh Gazov. Pererabotka i Transport Prirodnykh Gazov, 1953, 71-97.

SO: Sum. No. 744 8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

TESNER, P. A.

262T4

USSR/Chemistry - Catalysts, Petroleum Cracking Jan 53

"The Specific Catalytic Activity of Carbon," Ye. Ya. Robinovich, T. D. Snegireva, and P. A. Tesner, All-Union Sci-Res Inst of Natural Gases

DAN SSSR, Vol 88, No 1, pp 95-97

The mean specific catalytic activity of a carbon surface was detd in respect to hydrocarbon cracking reactions. This activity was then compared with that of an alumino-silicate catalyst. Accurate results could not be obtained because a layer of carbon forms on the surface of the alumino-silicate

262T4

catalyst which affects its activity. The ratio of the activity of the uncontaminated catalyst to that of carbon lies in the range 2.0-5.8. Presented by Acad P. A. Rebinder 17 Oct 52.

Tesner, P.A.

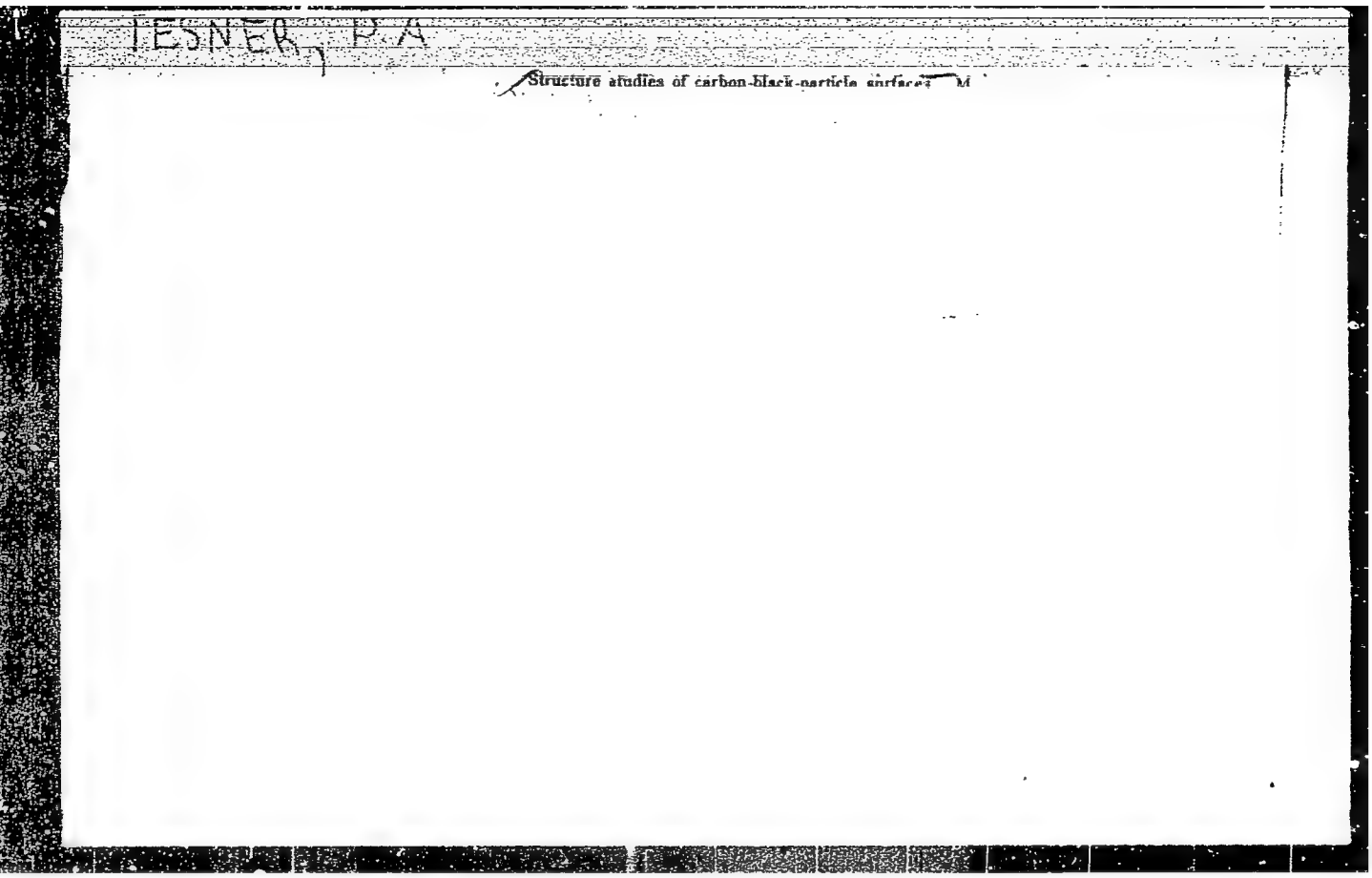
62

(1)

USSR

Benzene and methanol vapor adsorption on carbon black. M. M. Polyakova and P. A. Tesner. *Doklady Akad. Nauk S.S.S.R.* 93, 865-8(1953).—Different tech. grades of C blacks were used in the adsorption tests, and the specific surface of the various samples, as calcd. from the adsorption values, were different for the different grades. The abs. benzene adsorption isotherms calcd. from these values, however, agree excellently. The adsorption isotherms for MeOH on nonporous C blacks were very similar to the isotherms on graphite obtained by Pierce and Smith (*C.A.* 44, 4708*d*), but the MeOH adsorption isotherms on porous blacks are S-shaped curves, very similar to the C_6H_6 isotherms. The coating of the surface pores with thermally deposited C (by decompn. of hydrocarbons) even when only 1/4 mol. thick, produced the same type of isotherms as with graphite. The difference in behavior is explained by the nonuniformity of the porous C-black surfaces or sections of the surfaces.

W. M. Sternberg



TESNER, P.A.

Structure studies of carbon-black-particle surfaces. M

TESNER, P.A.

p 3-4

PHASE I BOOK EXPLOITATION 1159

Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut

Dobycha, transport i pererabotka prirodnykh gazov (Production, Transportation, and Processing of Natural Gases) Moscow, Gostoptekhizdat, 1954. 213 p. (Series: Its: Trudy, vyp. 5) 1,000 copies printed.

Ed.: Ivanov, A.K.; Executive Ed.: L'vova, L.A.; Tech. Ed.: Polosina, A.S.

PURPOSE: The book is intended for scientific, engineering, and technical personnel of oil, gas, and related industries. It is also recommended for workers in scientific research institutes and graduate students in these fields of endeavor.

COVERAGE: This collection of articles is concerned with questions of production, transportation, and the technology of processing gas and gas products. The text presents the results of theoretical and experimental studies made on gas hydrodynamics of gas-bearing strata, gas well exploitation, physicochemical processing of nat-

Card 1/5

ural gases, and research related to the construction and exploitation of gas pipelines, by the All-Union Instrument Scientific Research Institute (VNII) and the All-Union Scientific Research Institute of the Gas Industry (VNIIGAZ) between 1950-1952.

TABLE OF CONTENTS:

PART I. PROBLEMS IN GAS PRODUCTION

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Card 4/5

Production, Transportation (Cont.) 1159

AVAILABLE: Library of Congress

MM/sfm
2-11-59

Card 5/5

Tesner, P. M.

3917. TESTS OF A COMBINED SCHEME OF ELECTROSTATIC PRECIPITATORS AND CYCLONES FOR COLLECTING FURNACE BLACK. Kel'tsev, V.V., Petukhov, N.I., Skretskii, Yu. A. and Tesner, P.A. (Trud. Vsesoyuz. Neftegaz. nauch.-issled. Inst. (Proc. All-Union Petrol. Gas Inst., U.S.S.R.), 1954, (5), 138-148; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1955, (20), 48021). The Soviet SG-14 electrostatic precipitator has proved uneconomical and inefficient for the collection of furnace black. An improved arrangement has been tried in which an electrostatic precipitator forms the black into flocs which are then collected in a cyclone, or two cyclones in series. Gas speed in the active zone of the electrostatic precipitator can be increased from 0.4 to 0.5 m/sec to 2 m/sec with one cyclone and 5 m/sec with two. The arrangement will reduce capital cost, prevent black being carried into the atmosphere, and simplify the operation of electrostatic precipitators.

TESNER, P. A.

USSR/Chemical Technology

Card 1/1

Author : Tesner, P. A.

Title : Computation of incomplete combustion processes

Periodical : Dokl AN SSSR, 95, 6, 1275 - 1278, 1954.

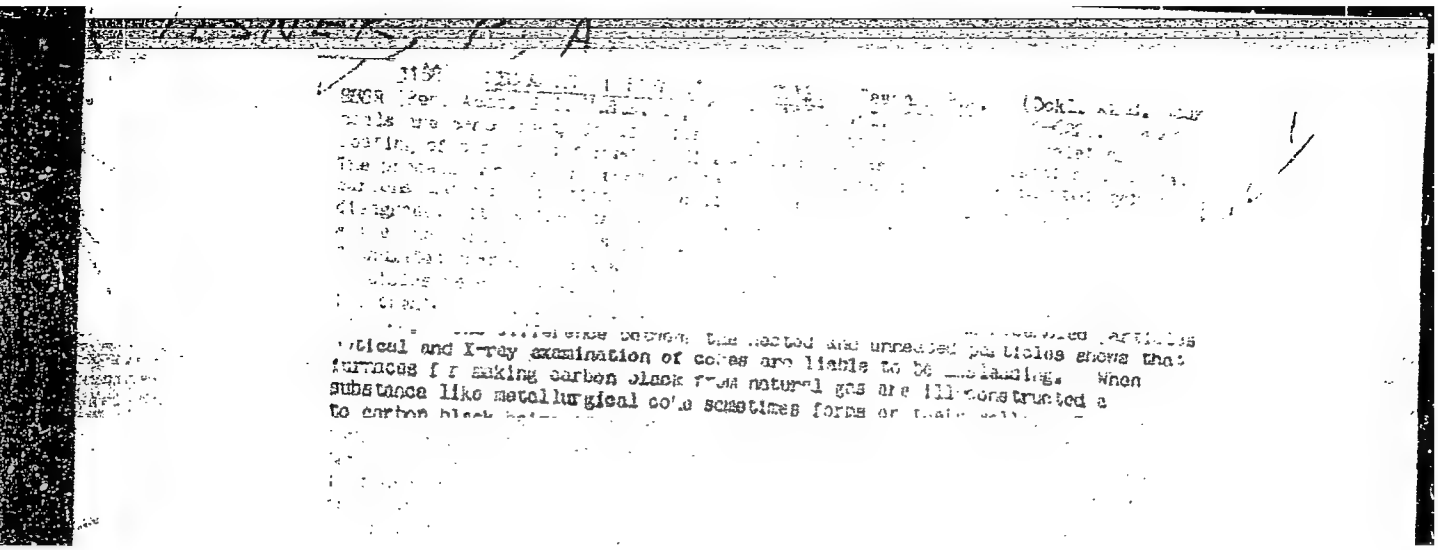
Abstract : Lately, incomplete combustion processes acquired a much greater importance than they had before, because sometimes one can obtain intermediate products during an incomplete combustion process (as obtaining acetylene during burning methane in oxygen). The article gives a method of thermodynamical computation of incomplete combustion processes, as for an example, computation of amount of furnace soot is given. Diagrams.

Institution : All Union Gas - Petroleum Scientific Research Institute

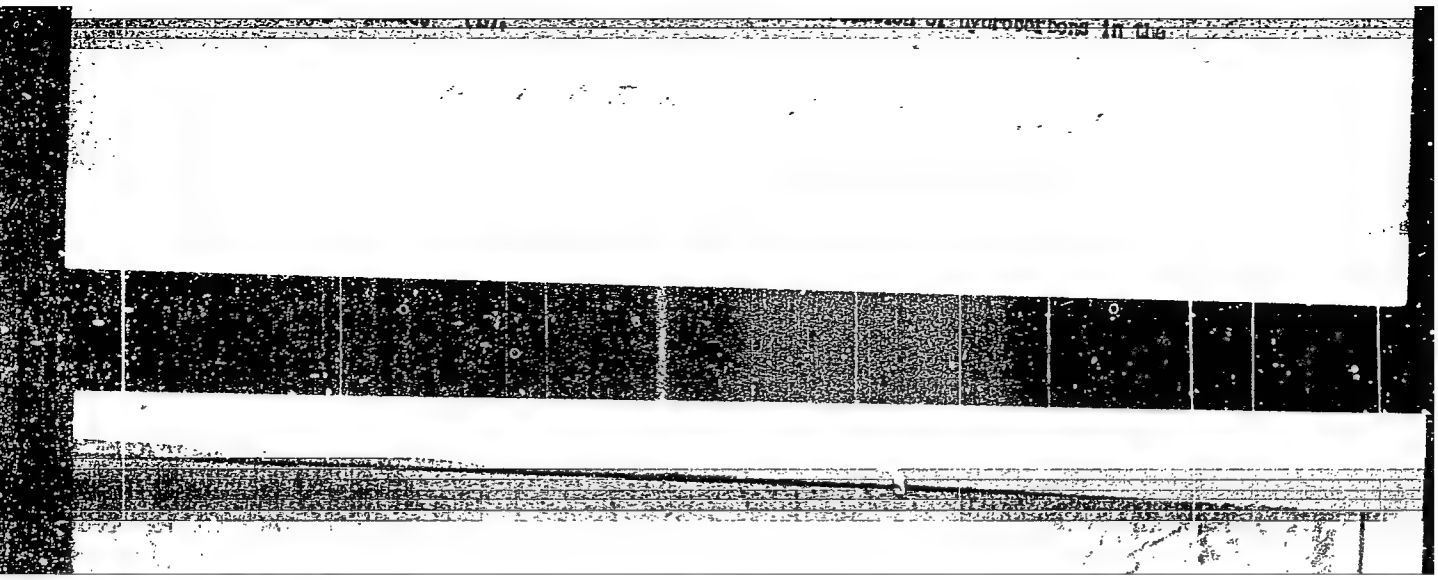
Submitted : 8 Feb 1954

TESNER, P.A.; SNEGIREVA, T.D.

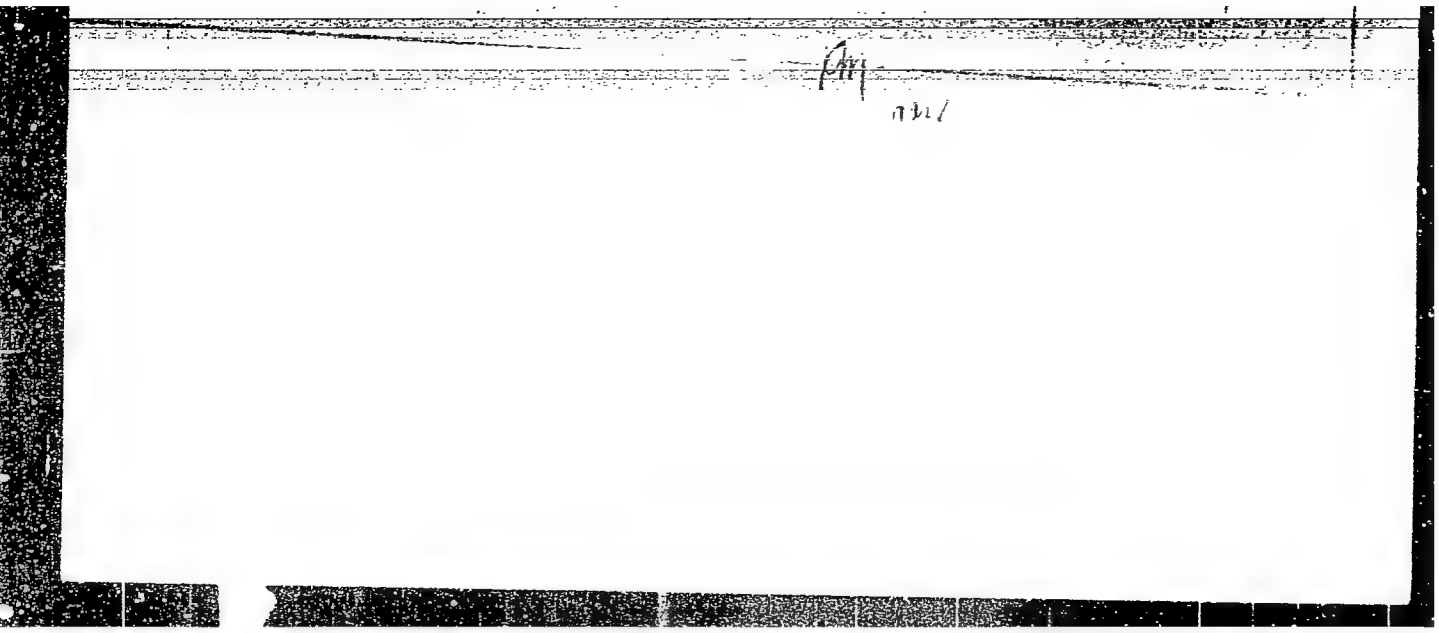
Effect of atmospheric conditions on the production of furnace black. Gaz.prom no.2:33-37 F '56. (MLRA 10:1)
(Carbon black)



...tical and X-ray examination of cores are liable to be ...blanking. When
furnaces for making carbon black from natural gas are ill-constructed a
substance like metallurgical coke sometimes forms or ...
to carbon black ...



APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001755510006-1"



SOV/81-59-5-16834

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 5, pp 455 - 456 (USSR)

AUTHOR: Tesner, P.A.

TITLE: The Thermodynamic Computation of the Continuous Processes of Synthetic Gas Production

PERIODICAL: V sb.: Khim. pererabotka topliva. Moscow, AS USSR, 1957, pp 358 - 371

ABSTRACT: A method is outlined for the thermodynamic computation of processes of incomplete combustion, applicable to the conversion of CH_4 with O_2 obtaining $CO + H_2$ and the gasification of solid fuel in generators with a "fluidized bed". In the computation the mixture of products of incomplete combustion are taken to be an equilibrium mixture of reaction components of the water. Graphs are presented for the above-mentioned processes of incomplete combustion which enable one to determine the composition of the gas obtained from the temperature of the reaction products.

Card 1/1

V. Kel'tsev

TESNER, K.H.

ROBINOVICH, Ye.Ya.; TESNER, P.A.

Studying carbon black formation in the diffusion flame of natural gas. Trudy VNIIGAZ no.1:55-73 '57. (MIRA 11:1)
(Carbon black)

TESNER, P.A.; SNEGIREVA, T.D.

Thermodynamic analysis of the effect of atmospheric conditions of the production of furnace black. Trudy VNIIGAZ no.1:86-99 '57.
(Carbon black) (Atmospheric temperature) (MIRA 11:1)

TESNER, P.A.

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Natural Gases and Petroleum. Motor and Jet Fuels. Lubricants. I-8

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2580

Author : Ievleva, Z.V., Tesner, P.A.

Inst : All-Union Scientific Research Institute of Natural Gases

Title : Investigation of the Process of Acetylene Formation on Incomplete Combustion of Methane in Oxygen.

Orig Pub : Tr. Vses. n.-i. in-t prirodn. gazov, 1957, No 1(9), 100-122

Abstract : A study of the process of incomplete combustion of methane (I) in oxygen, in the flame of a burner of the Bunsen type, and in a heated tube. On incomplete combustion of I in oxygen, within the inner cone of the Bunsen flame and in the heated tube, the process is clearly divided in two

Card 1/2

TESNER, P. A.

AUTHORS Iyevleva, Z.,V., and Tesner, P.A. 20-3-32/59

TITLE Formation of Acetylene on Incomplete Combustion of Methane in Oxygen. (Obrazovaniye atsetilena pri nepolnom gorenii metana v kislorode).

PERIODICAL Doklady Akademii Nauk, 1957, Vol. 115, Nr 3, pp. 537 - 540 (USSR.).

ABSTRACT One of the most productive methods of obtaining acetylene from natural gas is at present the oxidation pyrolysis i.e. the incomplete combustion of natural gas in oxygen. Several industrial plants are already working according to this method. The mechanism of formation of the acetylene in the flame is, however, completely uninvestigated. In the case of present methods, burners of the Bunsen type were used. Experiments with separated and open flame at various relations of methane and oxygen in the initial mixture were carried out, as well as experiments with the addition of propane. The curves of figure 1 show that the main part of methane and oxygen enters into the reaction in a very short section of the flame. In this section on the whole all reaction products are formed CO_2, C_2H_2, CO and H. In reality the combustion zone is obviously still smaller. Analogous results are also obtained in the case of a deviating composition of the initial mixture. The concentration of acetylene is reduced with increasing oxygen quantity. In the combustion of the propane-methane mixture the concentration of acetylene is increased. The latter is lower in the undivided flame. The H-concentration also passes a maximum whereas in the divided flame

Card 1/4

Formation of Acetylene on Incomplete Combustion of Methane in Oxygen.

an uninterrupted increase of the H-content is noticed. Figure 2 shows the content curves at 11 flame cross sections for various distances from the edge of the burner. According to this the concentration of the acetylene has its maximum above the peak of the inner cone (cross section x=3,7 mm) at the axis, its minimum beyond the peak. The reaction of the incomplete combustion of methane in O which takes place simultaneously with a considerable formation of acetylene is on the whole completed within a zone of a breadth of some tenths of mm. Outside of this zone, above the peak of the inner cone, the reaction takes place essentially more slowly. The acetylene content increases outside the O-zone up to a maximum which is 0,3 - 0,4 mm from the end of the O-zone. Then the acetylene content begins to decrease. For the purpose of studying the first stages of the reaction, experiments with simultaneous ignition of the initial mixture at the entire cross section were carried out. Thus it could be concluded that acetylene formation on the whole occurs at the end of the O-zone and is completed immediately after having left its vicinity. Figure 3 shows the temperature distribution curve along the vertical axis of the flame. The temperature rises quickly in the O-zone and then re-

Formation of Acetylene on Incomplete Combustion of Methane in Oxygen.

mains almost constant (about 1850). Figure 4 shows the results concerning the modification of concentration along the vertical axis of the flame. At the beginning of the O-zone the formation of CO and water takes place most quickly. Acetylene formation obtains a noticeable velocity only at the end of the O-zone, the velocity of the H-formation increasing simultaneously. This is in contradiction to the mechanism of Benedek and Laszlo according to which acetylene develops in the interaction between formaldehyde and methanol. Obviously the acetylene formation has a merely technical mechanism which takes place simultaneously with the H-formation and with an interaction of methane molecules or corresponding C-radicals after a sufficiently high temperature was obtained by combustion of CO, H_2O and CO_2. The water gas reaction has, however, to be taken into consideration by which the rise of velocity of the H-formation at the end of the O-zone is explained. It must take place here in the direction $CO + H_2O \rightarrow CO_2 + H_2$. The CO_2-concentration in the combustion products is, however, somewhat lower than the H-concentration, and thus this reaction alone cannot lead to the formation of the whole quantity of developing H.

20-3-32/59

Formation of Acatylene on Incomplete Combustion of Methane in Oxygen.

There are 4 figures, and 1 Slavic reference.

ASSOCIATION Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnykh gazov.

PRESENTED by Academician N.N.Semenov, February 28, 1957

SUBMITTED December, 30th, 1956.

AVAILABLE Library of Congress.

Card 4/4

TESNER, P. A.

"Formation of Dispersed Carbon by Thermal Decomposition of Hydrocarbons."

paper submitted at 7th International Symposium on Combustion, Loddon/Oxford. 27 Aug- 3 Sep 58.

SIDORENKO, M.V., glavnyy red.; ZAREMBO, K.S., red.; KREMS, Ye.A., red.; RAABEN, V.N., red.; RYABTSEV, N.I., red.; BRENTS, A.D., red.; ITSIKSON, B.S., red.; KOMISSAROV, P.G., red.; POPOV, V.I., red.; TESNER, P.A., red.; FAL'KEVICH, A.S., red.; STEPANCHENKO, N.I., vedushchiy red.; NOVIKOVA, M.M., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Ways of developing the gas industry of the U.S.S.R.; transactions of the All-Union Conference on Further Development of the Soviet Gas Industry] Materialy Vsesoyuznogo soveshchaniya po dal'neyshemu razvitiyu gazovoi promyshlennosti SSSR: Puti razvitiia gazovoi promyshlennosti SSSR. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1958. 432 p. (MIRA 12:4)

1. Vsesoyuznoye soveshchaniye po dal'neyshemu razvitiyu gazovoy promyshlennosti SSSR, Moscow, 1957.
(Gas industry)

SOV/81-59-5-16937

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 5, p 465 (USSR)

AUTHOR: Tesner, P.A.

TITLE: The Physical-Chemical Base of the Soot-Forming Process in a Flame

PERIODICAL: V sb.: Puti razvitiya gaz. prom-sti USSR. Moscow, Gostoptekh-izdat, 1958, pp 327 - 332

ABSTRACT: A discussion is given on the mechanism of formation of soot particles in a flame, which is based on the view point that the appearance of a new dispersion phase is determined by two simultaneously occurring processes: the formation of the nuclei of a new phase and their growth. The physical-chemical bases of the soot-forming process are studied, in laminar and turbulent burning.

B. Englin

Card 1/1

RAFAL'KES, I.S.; TESNER, P.A.

Investigating the process of the formation of carbon black during the thermal decomposition of hydrocarbons. Trudy VNIIGAZ no.3:3-33 '58. (MIRA 11:8)
(Natural gas) (Benzene) (Carbon black)

TESNER, P.A.

Formation of dispersed carbon in the thermal decomposition of hydrocarbons. Trudy VNIIGAZ no.3:34-63 '58. (MIRA 11:8)
(Natural gas) (Carbon black) (Colloids)

ROBINOVICH, Ye.Ya.; TESNER, P.A.

Studying the degree of dispersion of carbon black in various parts of the flame of a natural gas diffusion burner. Trudy VNIIGAZ no.3:82-94 '58. (MIRA 11:8)
(Carbon black) (Gas burners)

RAFAL'KES, I.S.; ROBINOVICH, Ye.Ya.; TESNER, P.A.

Studying the process of the manufacture of highly dispersed channel black. Trudy VNIIGAZ no.3:95-105 '58. (MIRA 11:8)
(Carbon black)

YEROFEYEV, N.; TALYZIN, N.; TESNER, P.

Italian gas industry. Gaz. prom. no.6:45-49 Je '58. (MIRA 11:6)
(Italy--Gas industry)

SOV/25-58-12-6/40

AUTHORS: Raaben, V.N., Candidate of Technical Sciences, Tesner, P.A., Doctor of Chemical Sciences, and Kozlov, A.L., Candidate of Geologic-Mineralogical Sciences

TITLE: The Natural Gas Industry (Promyshlennost' prirodnogo gaza)

PERIODICAL: Nauka i zhizn', 1958, Nr 12, pp 12-16 and p 1 of centerfold (USSR)

ABSTRACT: The authors give a brief review of the composition of natural gas and the location of the main deposits. The demand for gas by industry and public utilities is steadily growing. By the end of 1957, 18.6 billion cu m of natural gas were used, which is 60 times as much as in 1928. It is planned to increase the output of natural gas to 148 billion cu m by 1965, and to double the consumption by 1970-

Card 1/3

1972. The total gas deposits of the USSR are estimated at 20,000 billion cu m. Prospecting for new gas deposits is greatly facilitated by the recently issued geological map of the entire USSR, in a 1:1,000,000 scale. At the present time, more than 200 gas deposits have been discovered. The chief gas producing areas are the North Caucasus (Stavropol' and Krasnodar Krays), the Volga region (Saratov and Stalingrad Oblasts), the Komi ASSR, the Orenburg and Kuybyshev Oblasts. Natural gas has been discovered in Siberia, the western and eastern districts of the Ukraine, and in various parts of the Uzbek SSR (see map p 13). The output of gas can be increased by different artificial methods, such as hydraulic pressure, blasting operations and by increasing the porosity of rocks with chemicals. The total length of long distance gas pipe lines is 10,000 km at present. An additional 26,000 km of gas mains will be built, in which the diameter will be increased from 800

mm to 1,020 mm. Exhausted gas deposits and water bearing strata will be utilized for storing gas to meet peak loads. In 1957 more than 180 towns of the Soviet Union were supplied with gas. This number will be increased to 350 during the 1959-1965 period. The authors mention the various uses of natural gas in the chemical synthetic industry. There are 3 photos, 1 map and 1 schematic drawing.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza (The All-Union Scientific-Research Institute of Natural Gas)

TESNER, P.A.

Formation of valuable intermediate products in the incomplete combustion of hydrocarbons from natural gases. Trudy VNIIGAZ no.6:3-16 '59. (MIRA 12:10)
(Gas, Natural) (Petroleum chemicals)

POLYAKOVA, M.M.; RAFAL'KES, I.S.; ROBINOVICH, Ye..Ya.; TESNER, P.A.

Formation of acetylene in the thermal decomposition and incomplete combustion of natural gas. Trudy VNIIGAZ no.6:17-36 '59. (MIRA 12:10)

(Gas, Natural) (Acetylene)

POLYAKOVA, M.M.; TESNER, P.A.

Composition of gaseous combustion products in the diffusion flame of natural gas. Trudy VNIIGAZ no.6:63-73 '59.
(MIRA 12:10)

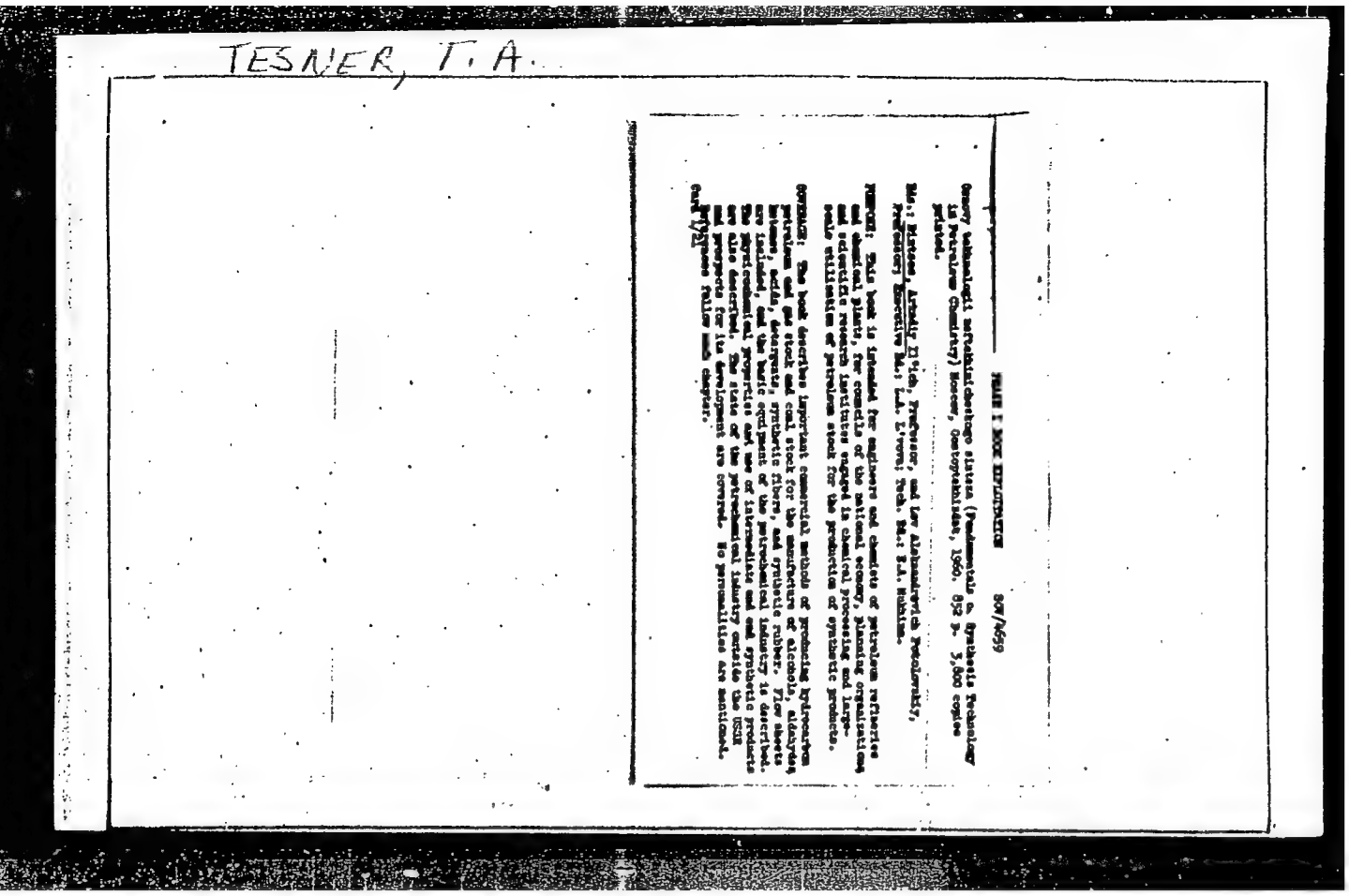
(Flame) (Gas, Natural)

TESNER, P.A.

paper submitted for the [illegible] Intl Symposium on Combustion, Pasadena, California, [illegible] August – 2 September, 1960.

4. Following is a list of the Soviet papers submitted to the combustion symposium:

L A Lovachev	The Dependence of Laminar Flame Properties on the Mechanism of Chain Reactions
L A Lovachev	The Theory of Flame Propagation in Systems Involving Branched Chain Reactions
NIKITIN, Ye.Ye	On the Mechanism of Non-Adiabatic Relaxation in Molecular Collisions
I N Denisov K I Shchelkin Ya K Troshin	Some Questions of Analogy Between Combustion in a Thrust Chamber and in a Detonation Wave
K I Shchelkin	On the Criterion of High-Frequency (screaming) Vibrations Generation in a Turbulent Combustion Chamber
A I Sertinov	A Simple Method for Determining Effective Activation Energies for Thermal Decomposition and Spontaneous Ignition of Certain Complex Molecules
L G Bolkhovitinov	On the Theory of Detonation Initiation by Impact
P A Tesner	The Energy of Activation of Gaseous Reactions with Solid Carbon
P A Tesner	Formation of Dispersed Carbon by Explosion and Thermal Decomposition of Acetylene
TESNER, P.A. ROFALKES, I.S. ROBINOVICH, Ye. Ye.	Formation of Dispersed Carbon in Hydrocarbon Diffusion Flames
BAZHANOVA, T.V. ZAYTSEV, S.G.	Effect of Dissociation on the Parameters of Reflected Shock Waves in Carbon Dioxide
ZAYTSEV, S.G. SOLOUKHIN, R.I.	Study of Combustion of Adiabatically Heated Gas Mixture
I N Sumdukov E K Chekalin	Some Methods for Studying Two-Phase Fuel-Air Mixtures in a Flow
E K Chekalin	Propagation of Flame in Turbulent Flow of Two-Phase Fuel-Air Mixture
STUPOCHENKO, Ye. V. SAMUYLOV, Ye. V. PLESHANOV, A.S. ROZHDESTVENSKIY, I.B. STACHKOV, I.P.	Thermodynamic Properties of Air at High Temperatures
A S Predvoditelev	Conditions of Regular Movement of Strong Shocks and Detonation
A S Predvoditelev	Some Remarks on the Regular Movement of Shocks with Spherical and Cylindrical Symmetry
A S Predvoditelev	Regular Motion of Shocks and of Detonation from the Viewpoint of Maxwell's Transfer Equations



TESNER, T. A.

PART I BOOK EXPLOITATION SOV/4659

Obshchestvo tekhnologii neftekhimicheskogo sinteza (Petrochemicals & Synthetic Technology in Petroleum Chemistry) Moscow, Gostoptekhizdat, 1960. 652 p. 5,000 copies printed.

Eds.: Kirsner, Arkadiy Il'ich, Professor, and Lev Aleksandrovich Feodos'yev, Professor; Executive Eds.: I.A. Lyvova; Tech. Ed.: T.A. Kozlova.

PURPOSE: This book is intended for engineers and chemists of petroleum refineries and chemical plants, for commits of the national economy, planning organizations and scientific research institutes engaged in chemical processing and large-scale utilization of petroleum stock for the production of synthetic products.

COVERAGE: The book describes important commercial methods of producing hydrocarbon petroleum and gas stock and coal stock for the manufacture of alcohols, aldehydes, fatty acids, detergents, synthetic fibers, and synthetic rubber. Flow sheets are included, and the basic equipment of the petrochemical industry is described. The physicochemical properties and use of intermediate and end synthetic products are described. The state of the petrochemical industry outside the USSR and prospects for its development are covered. No personalities are mentioned. There are [illegible] Soviet and [illegible] English-language references.

SIDORENKO, M.V., red.; VOLONIKHIN, Yu.V., red.; GORECHENKOV, G.I., red.; IVANTSOV, O.M., red.; MAL'KOV, I.A., red.; TESNER, P.A., red.; YENISHERLOVA, O.M., vedushchiy red.; RASTOVA, G.V., vedushchiy red.; SOLGANIK, G.Ya., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Techniques of the gas industry abroad; papers and reports presented at the 7th International Gas Congress] Tekhnika zarubezhnoi gazovoi promyshlennosti; doklady i referaty. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 367 p. (MIRA 13:11)

1. International Gas Congress. 7th, Roma. (Gas industry)

TESNER, P A.

p. 4,

PHASE I BOOK EXPLOITATION SOV/4659

Osnovy tekhnologii neftekhimicheskogo sinteza (Fundamentals of Synthesis Technology in Petroleum Chemistry) Moscow, Gostoptekhizdat, 1960. 852 p. 3,800 copies printed.

Eds.: Dintses, Arkadiy Il'ich, Professor, and Lev Aleksandrovich Potolovskiy, Professor; Executive Ed.: L.A. L'vova; Tech. Ed.: E.A. Mukhina.

PURPOSE: This book is intended for engineers and chemists of petroleum refineries and chemical plants, for councils of the national economy, planning organizations and scientific research institutes engaged in chemical processing and large-scale utilization of petroleum stock for the production of synthetic products.

COVERAGE: The book describes important commercial methods of producing hydrocarbon petroleum and gas stock and coal stock for the manufacture of alcohols, aldehydes, ketones, acids, detergents, synthetic fibers, and synthetic rubber. Flow sheets are included, and the basic equipment of the petrochemical industry is described. The physicochemical properties and use of intermediate and end synthetic products are also described. The state of the petrochemical industry outside the USSR and prospects for its development are covered. No personalities are mentioned. References follow each chapter.

Card 1/21

TESNER, P.A.

Rate of reaction between gases and solid carbon. Gaz.prom. 5 no.2:45-52 F '60. (MIRA 13:6)
(Coal gasification) (Gases) (Carbon)

S/138/61/000/002/006/008
A051/A129

AUTHORS: Zuyev, V.P.; Gilyazetdinov, L.P.; Tesner, P.A.

TITLE: The effect of the structural group composition of hydrocarbon oils on the yield and properties of carbon black

PERIODICAL: Kauchuk i rezina, no. 2, 1961, 29 - 32

TEXT: The authors have investigated the possibility of using a new complex index for characterizing the raw material: the factor of aromatization A, which is the product of the total number of rings in the molecule and the carbon content in aromatic structures: $A = K_o \cdot C_A$ (1), where K_o is the total number of rings in the molecule (aromatic + naphthene), C_A is the carbon content in the aromatic structures, %. The aromatization factor is additive with respect to the molecular parts of the mixture components. The disadvantage of this index is that it cannot be applied to low-aromatized oils, which, however, are hardly used in the production of carbon black. The authors show that this aromatization factor A characterizes the effect of the composition of oil and coal raw materials on the yield and the properties of the carbon black in the same way. With an increase in the aromatization factor, the yield, specific surface and oil number of

Card 1/4

the carbon black increase at the same time. Various forms of petroleum and coal oils and their mixtures were burned experimentally, using equipment with a productivity of 20 kg/h based on the raw material. The relationship of the specific surface of the carbon black S determined by the kinetic method to the aromatization factor is expressed by the equation: $S = 30 + 8.13 \cdot 10^{-4} \cdot A^{2.14}$ m^2/g (2). The intensity coefficient of the process of carbon black formation I calculated on the basis of data on the yield and dispersion of the carbon black. This coefficient is the number of carbon black particles formed from one gram of carbon raw material: $I = 3.1 \cdot p \cdot 10^8 \cdot S^3$ g^{-1} (3), where p is the carbon black yield, %. The logarithm of the intensity coefficient has a linear relationship to the logarithm of the aromatization factor of the raw material (Fig. 3). This relationship is expressed by the equation: $I = 8.5 \cdot 10^8 \cdot A^{3.48}$ g^{-1} (4). The results showed that the number of carbon black particles formed depends to a great extent on the aromatization factor. The authors point out that an aromatization factor of no less than 140 must be used in the production of jet and lamp oil carbon black with a yield of 56 and 63%, respectively. They also point out that compounds containing sulfur, nitrogen and oxygen increase the specific gravity of the raw material, but their action is not equivalent to the increase in the degree of aromatization of the raw material. There are 4 figures, 1 table and 15

The effect of the structural....

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute of the Tire Industry)

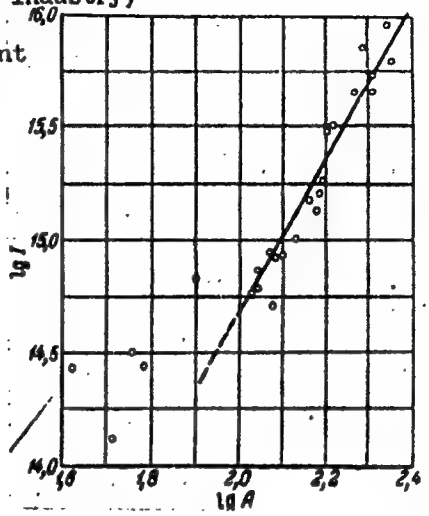


Figure 3: Relationship of the intensity coefficient of the carbon black formation process to the aromatization factor of raw material.

Card 3/4

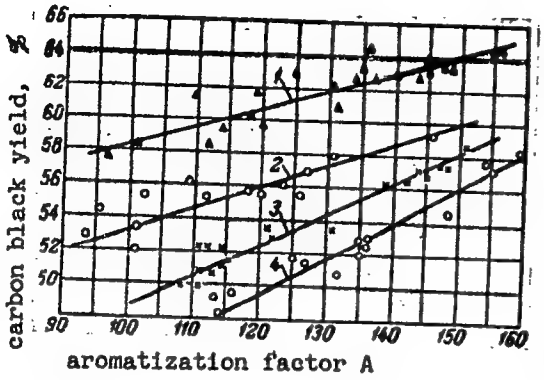


Figure 4: Relationship of the yield of lamp and jet carbon black to the aromatization factor of the raw material (industrial production of carbon black):
1 - lamp carbon black with a specific surface of 14 - 16 m^2/g;
2 - jet carbon black with a specific surface of 20 - 21.5 m^2/g;
3 - jet carbon black with a specific surface of 22 - 22.5 m^2/g;
4 - jet carbon black with a specific surface of 23 - 25 m^2/g.

TESNER, P.A.

Rate of interaction between gases and solid carbon. Trudy VNIIGAZ no.12:3-15 '61. (MIRA 15:1)
(Gas, Natural) (Carbon)

TESNER, P.A.

Formation of dispersed carbon during the explosion of acetylene.
Trudy VNIIGAZ no.12:16-26 '61. (MIRA 15:1)
(Carbon black) (Acetylene)

TESNER, P.A.; ROBINOVICH, Ye.Ya.; MATYUSHENKO, L.A.

Study of the black process during thermal decomposition of diluted mixtures of hydrocarbons. Trudy VNIIGAZ no.12:27-41 '61. (MIRA 15:1)

(Carbon black) (Hydrocarbons)

RAFAL'KES, I.S.; TESNER, P.A.

Study of the carbon black process during diffusion burning of various hydrocarbons. Trudy VNIIGAZ no.12:42-48 '61. (MIRA 15:1)
(Carbon black) (Hydrocarbons)

TESNER, P.A.; ROBINOVICH, Ye.Ya.; MATYUSHENKO, L.A.

Measuring the activation energy of the process of carbon formation at high temperatures. Trudy VNIIGAZ no.12:49-55 '61. (MIRA 15:1)

(Carbon)

SNEGIREVA, T.D.; TESNER, P.A.

Kinetics of carbon black oxidation. Trudy VNIIGAZ no.12:91-102 '61. (MIRA 15:1)
(Carbon black) (Oxidation)

MAR'YASIN, I.L.; TESNER, P.A.

Kinetics of the expansion of a carbon surface at high-temperature methane decomposition. Trudy VNIIGAZ no.12:195-223 '61. (MIRA 15:1)

(Methane) (Carbon)

TESNER, P.

Reply to the comments by V.S.Al'tshuler and I.G.Petrenko. Gaz. prom. 6 no.2:49-50 '61. (MIRA 14:4)

(Gases) (Carbon) (Al'tshuler, V.S.) (Petrenko, I.G.)

S/081/61/000/022/060/076
B101/B147

11.0100

AUTHOR: Tesner, P. A.

TITLE: Carbon black formation in decomposition and burning of hydrocarbons

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 395, abstract 22M102 (Gaz. prom-st', no. 5, 1961, 46-53)

TEXT: This is a brief presentation of the data of Soviet research work concerning the processes of carbon black formation in burning and in thermal decomposition of hydrocarbons. The processes are treated physicochemically as phenomena of the formation of a single disperse phase. There are 25 references. [Abstracter's note: Complete translation.]

/B

Card 1/1

MAR'YASIN, I.L.; TESNER, P.A.

Kinetics of carbon surface growth in the thermal decomposition of methane in the temperature range from 1400° to 1700°C. Dokl. AN SSSR 140 no.5:1121-1124 O '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza. Predstavleno akademikom M.M.Dubininym.

(Methane)
(Carbon)

S/064/62/000/003/006/007
B110/B101

AUTHORS: Tesner, P. A., Timofeyeva, I. M.

TITLE: Production of graphite products impermeable to gas by heat treatment in a hydrocarbon atmosphere

PERIODICAL: Khimicheskaya promyshlennost', no. 3, 1962, 52 - 56

TEXT: The making of graphite products rendered impermeable to gas by coating with a carbon film was studied. This film had been produced by thermal decomposition of a mixture of 40% natural gas (CH_4 = 99.1, C_6H_6 = 0.17, C_3H_8 = 0.09, C_4H_{10} and higher = 0.04, N_2 = 0.6 % by volume) and 60% nitrogen at ~1000°C. The extent that the pores are filled with carbon increases as the absolute decomposition rate and the reaction temperature decrease. It increases as the hydrocarbon concentration decreases and as the hydrogen concentration in the mixture increases. The films consist of microscopic packets with graphite lattices of the following dimensions: area of the hexahedron: 20 - 30 Å, in the normal 10 - 15 Å. Its density reaches a minimum of 1.08 g/cm³ at ~1700°C and a

Card 1/2

Production of graphite...

maximum of ~2.03 g/cm^3 at 1000 - 1300°C. When the duration of the experiment is lengthened the formation of carbon decreases at first rapidly and then slowly, becoming constant after the pores are closed. When the minimum film thickness amounts to half the maximum pore diameter, almost complete impermeability to gas (0.009 - 0.020 millidarcy) and a high degree of consolidation are achieved. The procedure is best carried out in two successive stages: (1) maximum consolidation is achieved at low temperature and low hydrocarbon concentration; (2) the film, when thick enough, is separated on the graphite surface. There are 4 figures and 2 tables. The most important English-language reference reads as follows: J. A. Graham et al. Industrial Carbon and Graphite, 1958, London, p. 309.

ASSOCIATION: VNIIGAZ; MKhTI im. D. I. Mendeleyeva (MKhTI imeni D. I. Mendeleyev)

Card 2/2

TESNER, P.A.; TIMOFEYEVA, I.M.

Preparation of gastight graphite materials in thermal treatment in the atmosphere of hydrocarbons. Khim.prom. no.3:204-208 Mr '62. (MIRA 15:4)

1. VNIIGAZ i Moskovskiy ordena Lenina khimiko-tekhnologicheskiy institut im. D.I.Mendeleyeva.
(Graphite) (Carbon) (Protective coatings)